REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 17-18 are added. Claims 1-18 are pending in the application.

I. Rejection under 35 U.S.C. § 103

In the Office Action, at page 2, numbered paragraph 4, claims 1-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent Pub. No. 04-365574 in view of Japanese Patent Pub. No. 05-004181. This rejection is respectfully traversed because Japan '574 does not teach or suggest:

> a changeable robot mechanism section; and
>
> a memory provided *at said robot mechanism section*, and storing information concerning parameters *inherent to individuality of said robot mechanism section* to be used in calculation for a locus control of the robot mechanism section by said robot control section,

as recited in independent claim 1 and similarly in independent claim 9.

In a non-limiting example, the present invention is a robot system that automatically updates data inherent to a robot mechanism section or unit when changing the section or unit. After changing the section or unit, data of identifiers are read by a robot control section from a memory provided at the robot mechanism section or unit. Thereafter, the robot control section calculates the locus control of the robot mechanism section or unit.

Japan '574 discusses that a discrimination signal inherent to a terminal effect element is transmitted from a transmitter/receiver to a control computing device, which reads a control parameter corresponding to the discrimination signal from a memory part. The transmitter/receiver transmits the signal to the memory part through a transmission device. The control parameter is stored in a memory part at the control computing device. Japan '574 does not discuss that the terminal effect elements are changeable and have a memory provided at the terminal effect element, but merely that a signal is transmitted from a discrimination signal transmitter/receiver to the control computing device. The terminal effect element does not include a memory that stores information concerning parameters inherent to individuality of the terminal effect element. Instead, the transmitter/receiver transmits discrimination signals corresponding to respective terminal effect elements to the control computing device. The discrimination signals identify the respective terminal effect elements, but are not the information

on parameters that are inherent to the individuality of changeable robot mechanical sections, as is recited in independent claims 1 and 9. The control computing device reads a control parameter from the memory part *within the control computing device* that corresponds to the discrimination signal and the working point of the terminal effect element is indicated based on computation executed by the computing part. Japan '574 does not discuss or suggest that parameters inherent to individuality of the changeable mechanism section are stored at the mechanism section. Further, Japan '574 does not discuss or suggest that the robot control section controls respective axes of the robot mechanism section.

The Examiner states that Japan '574 "has been silent about axes and calculation." The Examiner indicates that Japan '181 makes up for the deficiencies in Japan '574. Applicants respectfully submit that Japan '181 does not make up for the deficiency in Japan '574. Japan '181 discusses making combinations of coordinate transformation matrices on the basis of the data collected by an axis construction discrimination means to calculate an amount of change in the joint angle. Japan '181, however, does not make mention of a changeable robot mechanism section, nor does Japan '181 discuss a memory provided at the changeable robot mechanism section that stores information concerning parameters inherent to individuality of the robot mechanism section. Japan '181 discusses controllers for controlling operation of the arm joint modules, but fails to discuss or suggest a memory that stores information concerning parameters inherent to individuality of the changeable robot mechanical sections.

The applicants respectfully submit that the rejection fails to establish a prima facie case of obviousness. To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). *See* M.P.E.P. § 2142.

First, the applicants respectfully submit that neither Japan '574 nor Japan '181 refer to all the elements of independent claims 1 and 9, as is necessary to establish a prima facie case of obviousness. Specifically, both Japan '574 and Japan '181 fail to disclose a "changeable robot mechanism section" and "a memory provided at said robot mechanism section, and storing

information *concerning parameters inherent to individuality* of said robot mechanism section," as recited in independent claim 1, and similarly in claim 9.

Second, there is no adequate motivation in the prior art to combine Japan '574 and Japan '181. The Examiner states on page 4 of the outstanding Office Action that "it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the robot type of Kazuhisa et al. [Japan '574], with the robot type of kazuhisa [Japan '181], because this modification would have complemented the Kazuhisa's et al. robot so that the use of axis could used as calculation through matrices, thereby improving the efficiency and the reliability of the robot system [sic]." However, it is unclear from where the motivation to combine these references comes. There is no specific motivation to combine the references, particularly relating indicating a working point of an effect element with calculating an amount of change of each joint angle necessary to move an arm joint module.

In establishing a *prima facie* case of obviousness, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art. *See* M.P.E.P. § 2142. "To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teach." W.L. Gore & Associates v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

Therefore, the applicants respectfully submit that Japan '574 does not discuss or suggest "a changeable robot mechanism section," nor does Japan '574 discuss or suggest "a memory provided at said robot mechanism section, and storing information concerning parameters inherent to individuality of said robot mechanism section," as recited in independent claim 1 and similarly in independent claim 9. Japan '181 fails to make up for the deficiencies in Japan '574. Further, the Applicants respectfully submit that it is impermissible hindsight to combine Japan '574 and Japan '181, and that there is no adequate motivation found in the prior art to combine Japan '574 and Japan '181. Accordingly, claims 1 and 9 patentably distinguish over the references relied upon. Therefore, withdrawal of the § 103(a) rejection is respectfully requested.

Claims 2-8 and 10-16 depend directly or indirectly from independent claim 1 and 9, respectively, and include all the features of their respective claims, plus additional features that are not discussed or suggested by the references relied upon. For example, claim 6 recites that "said memory stores identification information for identifying individuality of the robot mechanism section, and said robot control section reads the identification information from said memory and

if the read identification information is different from corresponding identification information stored in the robot control section, the read information including the identification information is substituted for the corresponding information stored in the robot control section." Therefore, as claims 2-8 and 10-16 are dependent from independent claims 1 and 9, they are believed to be patentable for at least the reasons noted above. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

II. New Claims

New claim 17 recites that the features of the present invention include:

> a changeable robot mechanism section having a wrist unit detachable from a main unit, the wrist unit having at least one memory storing information concerning parameters inherent to individuality of the wrist unit, the main unit having at least one memory storing information concerning parameters inherent to individuality of the main unit.

Nothing in the references relied upon discusses or suggests such. It is submitted that new claim 17, which is different from prior filed claims, distinguishes over the prior art.

New claim 18 recites a method for calculating a locus of a robot, including:

> reading information concerning parameters inherent to individuality of the robot mechanism section stored in memories at the robot mechanism section;
>
> comparing the stored information with corresponding data stored in a memory of the robot control section to determine whether a kind of robot is changed and to determine whether at least one of the mechanical units of the robot mechanism section has changed;
>
> rewriting data indicating the kind of robot in the memory of the robot control section, if it is determined that the kind of robot has changed, and rewriting data indicating the changed mechanical unit, if it is determined that one of the mechanical units has changed; and
>
> computing the locus of the robot using the parameters inherent to individuality of the robot mechanism section.

Nothing in the prior art teaches or suggests such. It is submitted that new claim 18, which is different from and not narrower than prior filed claims, distinguishes over the prior art.

Conclusion

In accordance with the foregoing, claims 17-18 have been added. Claims 1-18 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: 2/13/06

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